

ABSTRACT

An implantable medical device includes a porous surface with a composite material located within the pores that includes a bioerodable material in combination with a bioactive agent. The composite material is adapted to erode upon exposure to the body of a patient, thus releasing the bioactive agent into the patient, whereas the porous surface remains on the device. In one embodiment, the composite material includes micro- or nano-particles that are deposited within the pores. In a further embodiment, the porous surface is an electrolessly electrochemically deposited material. Certain tie layer and other surface modification aspects are described to enhance various aspects of the bioactive composite surface. The bioactive composite surface is of particular benefit when provided on an endolumenal stent assembly in a manner adapted to elute anti-restenosis or anti-thrombosis agents or combinations thereof.